FIG. 1A

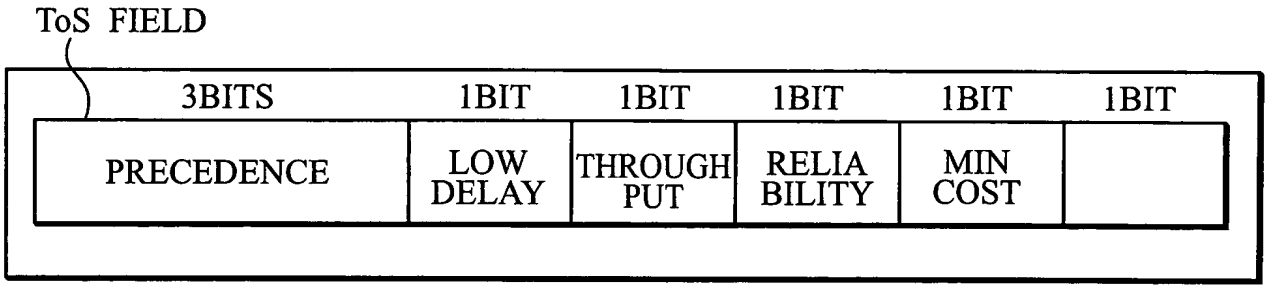

ToS FIELD
3BITS
1BIT
1BIT
1BIT
1BIT
1BIT
PRECEDENCE
LOW DELAY
THROUGH PUT
RELIA BILITY
MIN COST

FIG. 1B

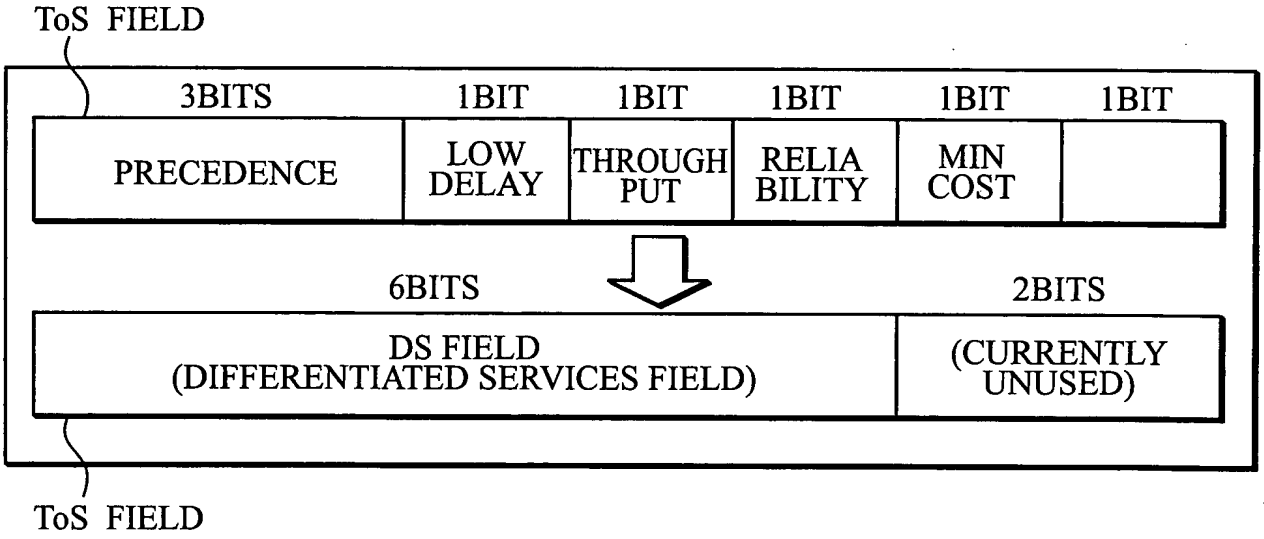

ToS FIELD
3BITS
1BIT
1BIT
1BIT
1BIT
1BIT
PRECEDENCE
LOW DELAY
THROUGH PUT
RELIA BILITY
MIN COST
6BITS
2BITS
DS FIELD
(DIFFERENTIATED SERVICES FIELD)
(CURRENTLY UNUSED)
ToS FIELD

FIG. 2A

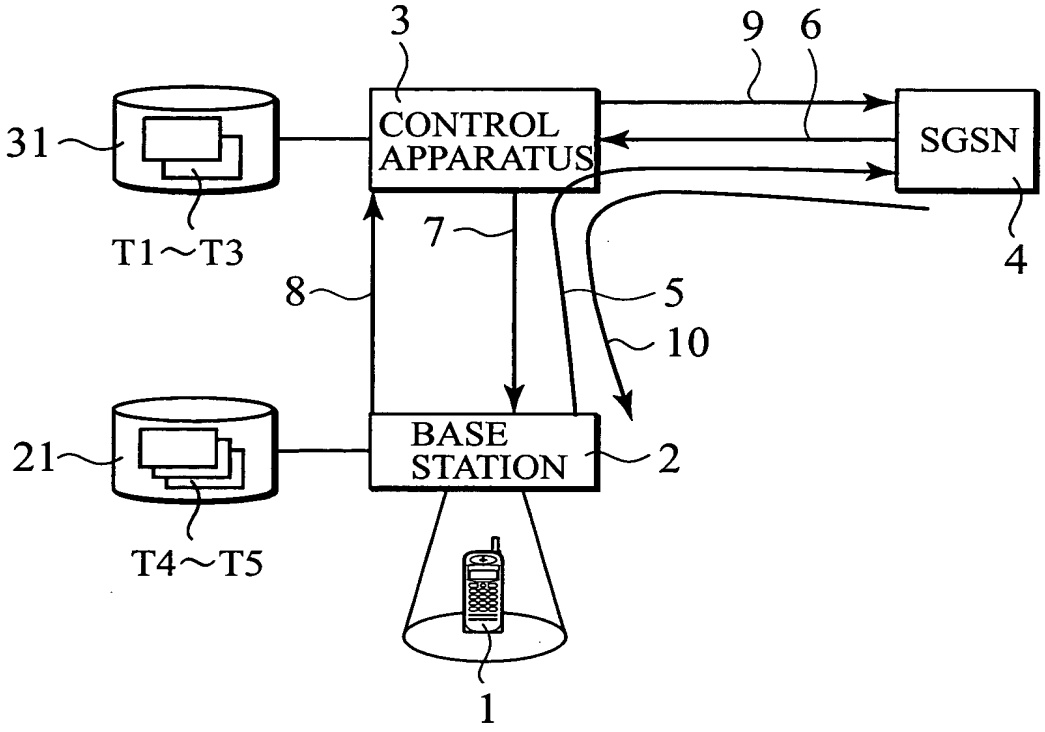

3
9
6
31
CONTROL APPARATUS
SGSN
T1~T3
7
4
8
5
10
21
BASE STATION
2
T4~T5
1

FIG. 2B

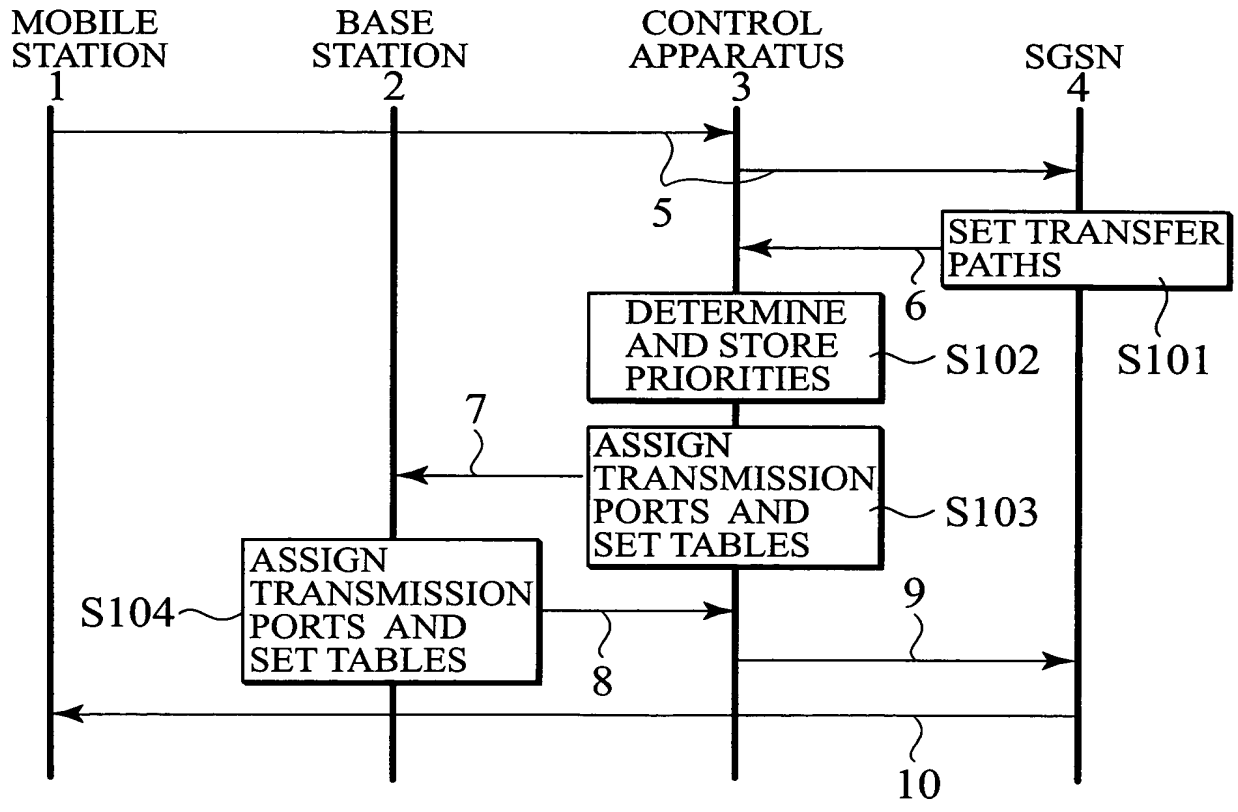

MOBILE STATION
1
BASE STATION
2
CONTROL APPARATUS
3
SGSN
4
5
SET TRANSFER PATHS
6
DETERMINE AND STORE PRIORITIES
S102
S101
7
ASSIGN TRANSMISSION PORTS AND SET TABLES
S103
S104
ASSIGN TRANSMISSION PORTS AND SET TABLES
8
9
10

FIG. 3

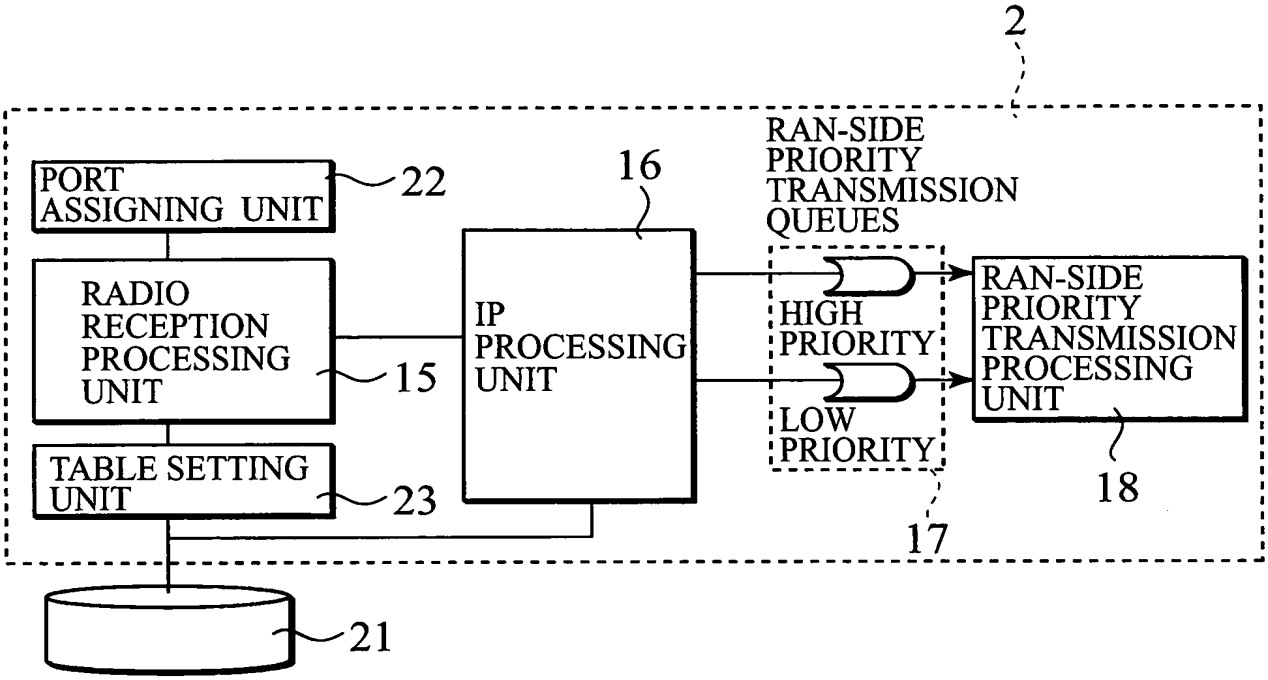

2
PORT ASSIGNING UNIT
22
16
RAN-SIDE PRIORITY TRANSMISSION QUEUES
RADIO RECEPTION PROCESSING UNIT
15
IP PROCESSING UNIT
HIGH PRIORITY
LOW PRIORITY
RAN-SIDE PRIORITY TRANSMISSION PROCESSING UNIT
TABLE SETTING UNIT
23
18
17
21

FIG. 4

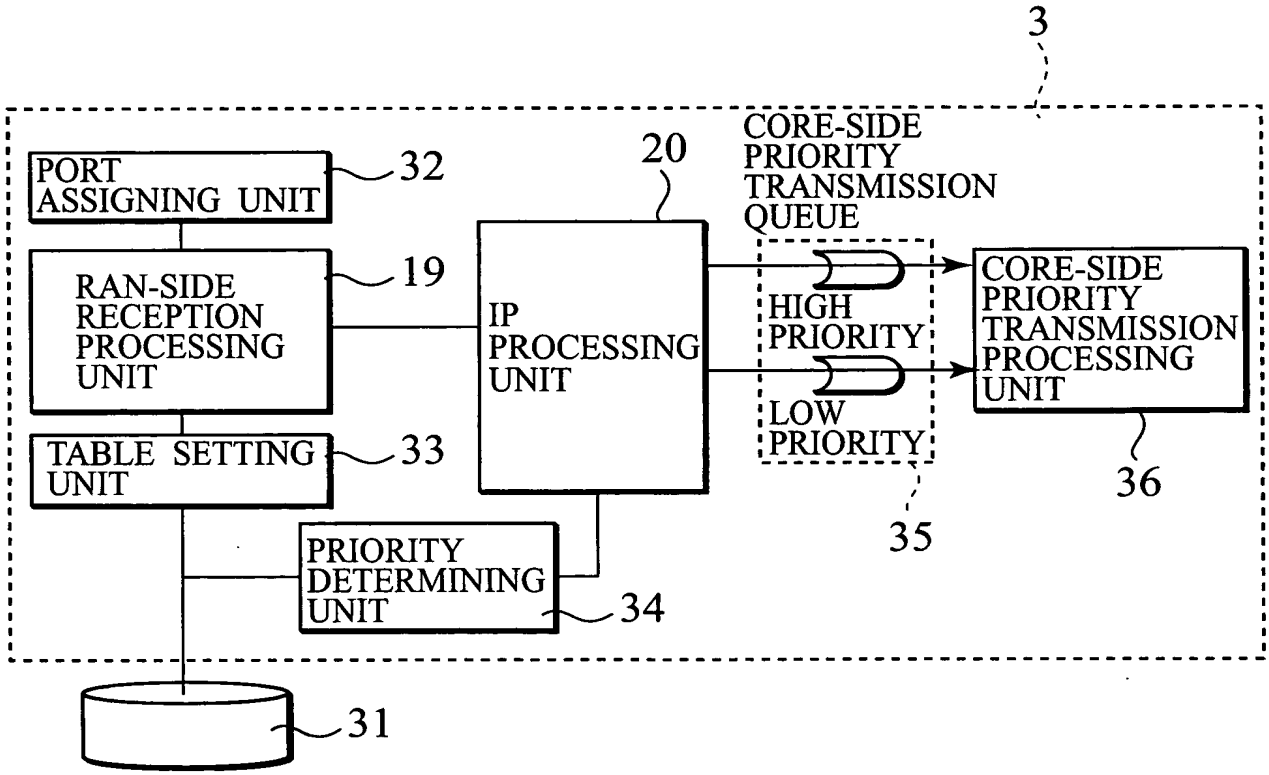

3
PORT ASSIGNING UNIT
32
20
CORE-SIDE PRIORITY TRANSMISSION QUEUE
RAN-SIDE RECEPTION PROCESSING UNIT
19
IP PROCESSING UNIT
HIGH PRIORITY
LOW PRIORITY
CORE-SIDE PRIORITY TRANSMISSION PROCESSING UNIT
TABLE SETTING UNIT
33
36
35
PRIORITY DETERMINING UNIT
34
31

FIG. 5

| TRAFFIC CLASS | PRIORITY |
|---|---|
| CONVERSATIONAL | HIGH PRIORITY |
| STREAMING | HIGH PRIORITY |
| INTERACTIVE | LOW PRIORITY |
| BACKGROUND | LOW PRIORITY |

T1

FIG. 6

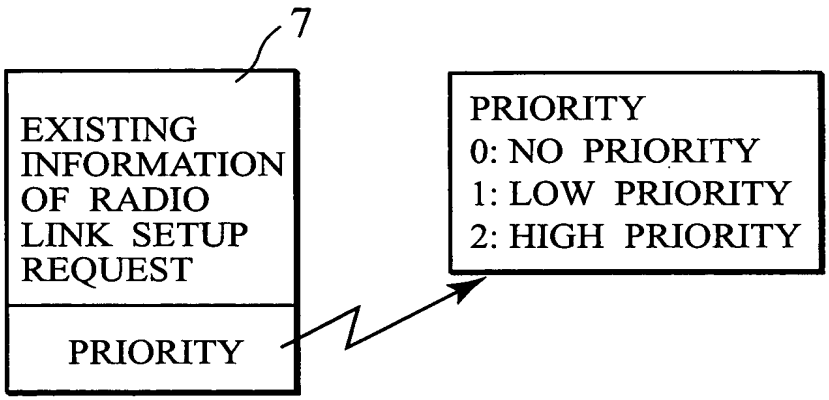


FIG. 7

| IP ADDRESS | UDP PORT NUMBER | TEID | RAB |
|---|---|---|---|
| ... | ... | ... | ... |
| ... | ... | ... | ... |

T2

FIG. 8

T3

| RAB | NODE B-SIDE TRANSMISSION/ RECEPTION PORT INFORMATION | | SGSN-SIDE TRANSMISSION/ RECEPTION PORT INFORMATION | | | PRIORITY |
|---|---|---|---|---|---|---|
| | IP ADDRESS | UDP PORT NUMBER | IP ADDRESS | UDP PORT NUMBER | TEID | |
| ... | ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... | ... |

FIG. 9

| RADIO CHANNEL INFORMATION | | RAB |
|---|---|---|
| CELL NUMBER | CHANNEL NUMBER | |
| ... | ... | ... |
| ... | ... | ... |

T4

FIG. 10

| IP ADDRESS | UDP PORT NUMBER | RAB |
|---|---|---|
| ... | ... | ... |
| ... | ... | ... |

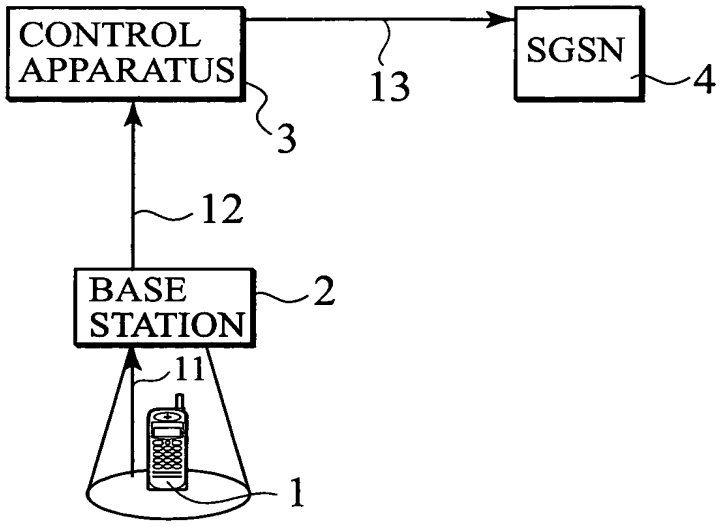
T5

FIG. 11

| RAB | UE-SIDE RADIO CHANNEL INFORMATION | | RNC-SIDE TRANSMISSION/ RECEPTION PORT INFORMATION | | PRIORITY |
|---|---|---|---|---|---|
| | CELL NUMBER | CHANNEL NUMBER | IP ADDRESS | UDP PORT NUMBER | |
| ... | ... | ... | ... | ... | ... |
| ... | ... | ... | ... | ... | ... |

T6

FIG. 12A



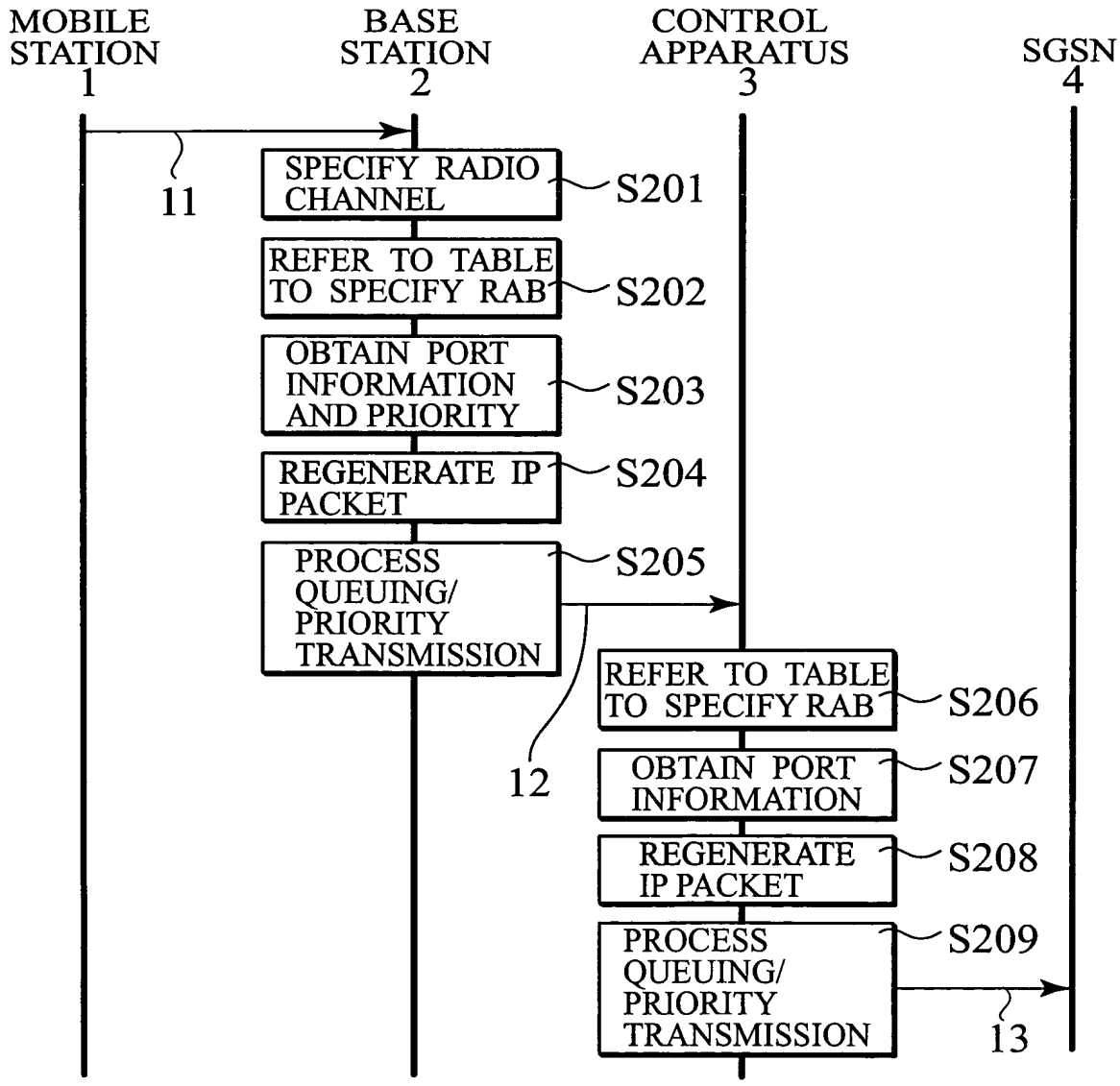


FIG. 12B